

# Beneficial Use of Contaminated Sediments Workshop

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## **Topics**

- Beneficial Use in Sediment Remedial Alternatives
- Use of Treatability Studies
- Evaluation of Remedial Alternatives



#### **Beneficial Use in Sediment Remedial Alternatives**

- In the Remedial Investigation, the nature and extent of contamination, the fate and transport of contaminants, and the risk to human health and the environment are documented.
- Unacceptable risk triggers the Feasibility Study
  - Remedial Action Objectives identify outcomes that reduce unacceptable levels of risk and address source.
  - Preliminary Remedial Goals specify the metrics to be achieved to demonstrate the objectives of the remedial action have been met.
  - Alternatives are developed to meet the PRGs and achieve the actions.



### **Use of Treatability Studies**

- "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (EPA 540/G-89-004, OSWER Directive, 9355.01)
- Chapter 5 discusses Treatability Investigations
- Conducted during RI/FS to inform development of remedial alternatives
- If beneficial use is being considered, any treatment or other technologies should be discussed at this time so that treatability studies can be scoped and conducted.
- Treatability studies can also be performed during the remedial design or remedial action phases. If the results of the treatability studies lead to changes in the remedy selected in the Record of Decision, a modification of the ROD (Explanation of Significant Differences or ROD Amendment) may be needed.



#### **Evaluation of Remedial Alternatives**

§ 300.430(e)(9)(iii) Presents the nine criteria, the factors that all remedial alternatives must be compared against.

- Threshold Criteria: All alternatives must meet threshold criteria (except for the no action alternative)
  - Overall protection of human health and the environment
  - Compliance with ARARs
- Balancing Criteria: Used to compare each alternative
  - Long-term effectiveness and permanence
  - Reduction of toxicity, mobility or volume through treatment
  - Short-term effectiveness
  - Implementability
  - Cost
- Modifying Criteria
  - State acceptance
  - Community acceptance